Application No.: 10/646,575

Office Action Dated: December 1, 2010

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. - 16. (Canceled)

17. (Currently amended) A method for querying and returning instances of items comprising:

receiving from an application that operates in user space of an operating system, a request identifying an item, said item having a scope that includes at least one additional item, wherein the operating system includes including a database management program that encapsulates a file system, the database management program encapsulating the file system by exclusively handling file system access requests from a group of user mode applications, the group of user mode applications being configured to interface with an operating system application program interface, the operating system application program interface being configured to send read/write requests issued by the group of user mode applications to the database management program of the operating system, the database management program of the operating system being configured to open files stored in the file system in response to receipt of read/write requests and the operating system is configured to store data in the file system as file streams, and generate items associated with the file streams in the database management program;

generating, by the database management program that encapsulates the file system, [[an]] a search object that encapsulates an instance of the identified item, the encapsulation of the identified item the search object providing a method for querying the database management program;

executing, by the database management program that encapsulates the file system, a query on said <u>search</u> object for at least one additional item, the query utilizing the scope of the identified item as a parameter;

identifying an item in the database management program that includes data that satisfies the query;

de-serialize data stored in a file into an item, the file stored in the file system, the file describing the item; and

Application No.: 10/646,575

Office Action Dated: December 1, 2010

returning <u>the item</u> to the application <u>at least one instance of the at least one additional</u> <u>item that matches the query</u>.

18. (Previously presented) The method of claim 17, further comprising:

interfacing with the database management program, each item associated with at least one schema that defines an item's type; and

generating at least one data class for each item stored in said database, wherein the fields of the item's type map to the fields of the at least one data class.

- 19. (Previously presented) The method of claim 18, wherein the at least one schema that defines an item's type is received from a third party.
- 20. (Previously presented) The method of claim 18, wherein generating an instance of said identified item further comprises:

generating an instance of the identified item from at least one data class, wherein the generated instance includes methods specific to the data class.

- 21. (Currently amended) The method of claim 17, wherein said <u>search</u> object utilizes a connection to the database management program to query the database management program and modify the items stored in said database management program.
- 22. (Previously presented) The method of claim 21, wherein the query further specifies at least one of an item's property, an item's extensions, and an item's relationships as a query parameter.
- 23. (Previously presented) The method of claim 17, further comprising: receiving an indication that said application has modified the at least one instance of the at least one additional item.
- 24. (Currently amended) The method of claim 23, wherein the <u>search</u> object utilizes a method for saving changes to save the modifications to the at least one item stored in said database management program integrated with <u>encapsulating</u> the file system.

Application No.: 10/646,575

Office Action Dated: December 1, 2010

25. (Currently amended) The method of claim 17, wherein the scope of said identified item includes a plurality of items stored in a plurality of database management programs integrated with a plurality of file systems.

- 26. (Currently amended) The method of claim 25, wherein the <u>search</u> object establishes a connection with the plurality of database management programs that encapsulate a plurality of file systems to query for the at least one additional item.
- 27. (Currently amended) The method of claim 26, wherein the <u>search</u> object establishes an individual connection with a specific database management program that encapsulates a specific file system in the plurality of database management program integrated with a plurality of file systems to save changes to a specific item stored in said specific database management program that encapsulates a specific file system.
- 28. (Currently amended) The method of claim 27, wherein the <u>search</u> object includes a conflict handler method that is configured to detect when multiple applications modify instances of the same item and determine what modifications to save by utilizing a policy.
- 29. (Currently amended) The method of claim 17, further comprising: maintaining a cache of <u>items</u> the at least one instance of the at least one additional item that matches the query, wherein subsequent queries are performed against the cache.
- 30. (Currently amended) The method of claim 29, further comprising: receiving an indication that an application has modified the at least one instance of the at least one additional item; and

utilizing a method to save changes to the at least one instance of the at least one additional item in said cache.

31. (Previously presented) The method of claim 17, wherein said identified item is a set of items that includes one of an entire set of items in the database management program, any

Application No.: 10/646,575

Office Action Dated: December 1, 2010

subset of items in said database management program, and any individual item in said database management program.

32. (Currently amended) The method of claim 17, wherein the identified <u>item</u> is an item of a type folder, the scope of the item of the type folder includes any items that are contained within the item of the type folder.

- 33. (Previously presented) The method of claim 17, wherein each item stored in said database management program includes a relationship to another item stored in said database management program, said relationship defined by a property in an item that is a source of the relationship and a property in an item that is the target of the relationship.
- 34. (Previously presented) The method of claim 33, wherein a query that includes an item's relationships as a parameter returns an instance of any item that is the source a relationship and an instance of any item that is the target of a relationship.
- 35. (Previously presented) The method of claim 17 further comprising: receiving a request from an application to track changes to one of an item, an item's extensions, and an item's relationships;

registering, the database management program integrated with the file system, said application for a notification service that notifies said application when any changes to one of the item, the item's extensions, and the item's relationships are detected.

36. (Previously presented) The method of claim 35, wherein said notification service notifies said application when any changes to items associated with the item, the item's extensions, and the item's relationships are detected.